

## ABSTRACT OF THE DISCLOSURE

A signal transmitted from a transmitting-side apparatus is received, through a propagation path, in receiving section 101 in a digital reception apparatus  
5 illustrated in FIG.1. A signal 150 (received signal) received in receiving section 101 is amplified in amplifying section 102 to be an amplified signal 151. The amplified signal 151 is output to distortion estimating section 103a and distortion compensating  
10 section 103b in distortion correcting section 103. Distortion estimating section 103a has information on the distortion characteristic of amplifying section 102 input beforehand thereto. Distortion estimating section 103a estimates a distortion component contained  
15 in the amplified signal 151, using the information on the distortion characteristic of amplifying section 102 and the amplified signal 151 from amplifying section 102. Further, using the estimated distortion component, the section 103a generates a correcting signal 152 to correct  
20 the distortion component of the amplified signal 151. Distortion estimating section 103a is comprised of, for example, an element having the inverse characteristic of a section where the resultant signal needs the correction (in this case, amplifying section 102). The  
25 correcting signal 152 generated in distortion estimating section 103a is output to distortion compensating section 103b. Distortion compensating section 103b

multiplies the amplified signal 151 from amplifying section 102 by the correcting signal 152 from distortion estimating section 103a. A corrected amplified signal 153 is thereby obtained which equals the amplified signal 151 from which the distortion component is removed. The obtained corrected amplified signal 153 is output to demodulating section 104. Demodulating section 104 performs the demodulation processing on the corrected amplified signal 153, and thereby obtains a demodulated signal 154.